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ABSTRACT

A method of evaluation of prereading skills in preprimary school children is described. The method, employing a check list, can provide either a record of class performance, or a cognitive profile of an individual student. The instrument is divided into 8 major task areas that may be seen as plateaus of cognitive development of prereading skills. It includes such activities as following directions, dramatizing, being read to, bookhandling, relating persons and names, word-related visual and auditory discrimination, and attempts to read. In using the check list, the teacher records the date when observation of a positive demonstration of a particular activity took place. A comprehensive record of sequential growth in the eight skill areas is thus compiled. A copy of the check list, a description of each of the eight cognitive activities, symptoms of each of the activities, and guides for discerning them are included. (AE)

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EVALUATION OF COGNITIVE DEVELOPMENT
AN OBSERVATIONAL TECHNIQUE
PRE-READING SKILLS

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Evaluation of Cognitive Development
An Observational Technique
Pre-Reading Skills

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Introduction

This effort to devise a method of evaluating the learning development of preprimary children was the outgrowth of a study in Early Childhood Education conducted by the Research and Development Center in Educational Stimulation at the University of Georgia.

The study has been in existence since fall of 1966 when children three, four, and five years of age were enrolled in a preprimary educational program at Suder School in Clayton County, Georgia. Since that time a new group of three-year-olds has been added annually.

Approximately sixty children in each age group have been involved in the preprimary program each year. They have been chosen as representative of a cross section of the local community.

Curriculum and tests have been developed in the various areas of learning in an effort to stimulate the educational development of these children and to evaluate their growth.

Rationale for the Project

After using numerous tests of ability and achievement with children of all ages, it became clear that these are not the only types of measures that should be used in evaluating child development.

In dealing with three-, four-, and five-year-olds it seems mandatory that other methods of estimation be used, not only because extensive adequate tests are not available, but because this is a logical area in which to initiate a new type of measure.

This thinking led to an effort to establish "observation" as a technique for evaluating children's learning progress in the preprimary program at Suder School, an experimental field for the Research and Development Center of the University of Georgia.

Teachers of ten preprimary groups of children, three, four, and five years of age, noted the kinds of symptoms that they had observed in the classroom and that they felt showed developmental progress in children's learning.

After these were categorized and arranged in sequential order, the teachers attempted to indicate the observed symptoms as they occurred in each child. As these symptoms became evident and were noted, a profile of the individual child's development was revealed.

Obviously this method of measurement tended toward a better and fuller understanding of the child and his own cognitive development, as well as revealed how children learn and grow.

A special feature of this approach is emphasis on the positive identification of evidence of progress to the exclusion of negative reports. Teachers report only what a child can do.

Procedure

The project aimed at the following goals:

To designate areas of developmental growth in three-, four-, and five-year-olds.

To point out symptoms of growth within these areas.

To describe various activities that enhance this development.

To devise check lists for recording evidence of these symptoms.

Certain areas of growth were designated in three-, four-, and five-year-old children, and a list of sequential signs of growth in each of these areas in the form of descriptive behaviors was devised. The indicated areas of growth considered were pre-reading skills and pre-mathematics concepts and skills. Only pre-reading skills are covered here. Other areas of growth could, of course, be added.

To develop a scale it was necessary for many teachers to have observed many children through the preprimary years in a school situation which provided opportunities, experiences, and guidance for growth. The content of the scale was rethought, rewritten, discussed, and rearranged many times as the teachers observed and followed the changes in the children.

Check lists on which to indicate changes were drawn up and periodic checks were made in order to learn whether a positive sign of certain symptoms could be observed. No record was made of a behavior until it had been observed positively.

Areas of Growth

Pre-reading skills are seen as a form of communication involving interactions with others and with the environment. Some of the important factors of this relationship are listening, comprehension, and response in the form of a behavior, either of the verbal or performance type.

Listening requires auditory acuity but it must also include awareness and attention in order to bring about comprehension or understanding which is necessary for eliciting response. The response may be a performance, or it may be of a verbal nature where the child uses words common to his peers and environment.

The fields of evidences of development include following directions, dramatizing, being read to, bookhandling, relating persons and names, word-related discrimination both visual and auditory, and attempts to read.

Symptoms to be observed positively are, for example: "Follows simple directions," "Orients book correctly," "Listens to stories without pictures," "Sees simple likenesses and differences," etc. These are a few of the symptoms from the various categories. A complete list of these symptoms in the form of a check list follows.

In using this check list, the teacher notes, for each child, the date when she observes a positive demonstration of a symptom. By keeping an individual profile for each child the teacher may provide a record of his personal progress in these behaviors during the pre-primary period.

A description of the symptoms together with guides for discerning them follow the sample check list.

Directions for Using the Check List

The Check List can be used as:

1. A Class Record
2. An Individual Profile

In using the Check List as a Class Record, the names of all pupils should be entered at the top of the form between the vertical lines. The date when each child evidenced each symptom positively for the first time should be recorded in the corresponding box in the body of the form. This makes it possible to survey at one time the progress of an entire class to date.

In using the Check List as an Individual Profile, one child's name should be entered at the top of one form. Dates for noting when symptoms were observed positively for this child should be indicated in sequence above the horizontal lines across the top of the form. A check () should be made in the appropriate box in the body of the form for each accomplishment.

The Class Record is best maintained by noting behavior as it occurs. The Individual Profile can be filled in at frequent intervals or at the end of the period covered by the Class Record. This personal record of a child's progress can be included in his personal folder to be filed in the school office or passed on to the next grade.

SYMPTOMS OF COGNITIVE DEVELOPMENT

Pre-Reading Skills

Symptoms

Directions

- A. Follows simple directions--
one step
1. Individual
2. Group
- B. Follows multiple directions--
two or three steps
1. Individual
2. Group
- C. Retains delayed directions

Dramatizing

- A. Spontaneous reacting to
pictures or stories
(observable reacting)
- B. Finger play-attending
- C. Finger play-participating--
acting out
- D. Role-playing
1. Spontaneous
2. Directed
- E. Composes original story

Being Read to

- A. Comes readily to reading
- B. Listens to stories
1. With pictures
2. Without pictures
- C. Asks to have reading done
- D. Listens to stories
1. Short
2. Medium
3. Long
- E. Gets book to retell story

Bookhandling

- A. Book is to read
- B. Orients book correctly
- C. Knows where beginning is
- D. Knows where ending is
- E. Knows where title of book is
- F. Knows where front of book is
- G. Knows where back of book is
- H. Turns pages correctly (R-L)
- I. Knows where top of book is
- J. Knows where bottom of book is
- K. Left to right reading
- L. Rows-return sweep
- M. Observes relationship of text
and pictures

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Symptoms

Persons and Names

- A. Recognizes oral names
 - 1. Self
 - 2. Others
 - 3. Absentees
- B. Recognizes written names
 - 1. Self
 - 2. Others (some)
- C. Writes names
 - 1. Self
 - 2. Others (some)
- D. Spells names (orally)
 - 1. Self
 - 2. Others

Visual Discrimination

- A. Seeing simple likenesses and differences
 - 1. Knows likenesses
 - 2. Knows differences
 - 3. Discriminates between likenesses and differences
- B. Distinguishes letters from other forms (any)
- C. Distinguishing words
 - 1. First letters
 - 2. Letter order
 - 3. Whole words

Auditory Discrimination

- A. Distinguishing familiar sounds
- B. Rhyming
- C. Letter sounds
 - 1. Beginning sounds
 - 2. End sounds

Attempts to Read

- A. Relates to book--responds to pictures in books
- B. Attaches name he originates for book
- C. Reads (tells) stories from pictures in unfamiliar book
- D. Asks to read from certain book (even if not able)
- E. Learns words
- F. Spontaneously picks out words
- G. Asks help with reading
- H. Reads whenever asked to
- I. Resists interruptions of reading
- J. Helps others read
- K. Brings library or other books to read (himself)

Pre-Reading Skills

Field of Learning Directions

This area involves several abilities such as hearing, listening, and comprehension. In order to follow directions the child must hear them auditorily, pay attention to what is being said, and also understand or comprehend the statement. Of course, it must be assumed that the task is consistent with the child's capability and maturity. In multiple and retained delayed directions, he must also be able to hold a task in his mind over a short period of time, or to recall it after a longer period of time has elapsed, or after one or more events have occurred.

Pre-Reading Skills

Field of Learning Directions

<u>Symptoms</u>	<u>Guides</u>
A. Follows simple directions-- one step	
1. Individual	"Pick up the pencil, Suzie." "Go to the table, John."
2. Group	"Children, come and sit on the rug." "Everyone get coats to go outside."
B. Follows multiple direc- tions--two or three steps	
1. Individual	"Get your pencil, Ann, and go to the table."
2. Group	"Children, wash your hands and come to reading." "Everyone put away the blocks and come to the table."
C. Retains delayed direc- tions	"When you finish painting, wash your hands and go to the table for juice." "After you have seen the movie, go over and sit on the rug."

Pre-Reading Skills

Field of Learning Dramatizing

Dramatizing comes rather naturally to young children. They tend to act out what they hear and see. Frequently small children will respond spontaneously to words or pictures, with a physical reaction, whether sound, motion or emotion.

A young child often imitates what he sees another do, either alone or along with others, or imagines himself a character in a story he hears, and behaves spontaneously according to that role. This role playing might also be directed.

It is not unusual to find a child with a vivid imagination who can make up a tale about something he has not actually seen or experienced. Frequently, he is the main character.

Usually, young children can make up a story about an event that has occurred. The amount of prodding necessary and the length and quality of the story depend upon the age and capacity of the child.

Pre-Reading Skills

Field of Learning Dramatizing

<u>Symptoms</u>	<u>Guides</u>
A. Spontaneous reacting to pictures or stories (observable reacting)	Makes noise like airplane when word is read or picture observed Roars like a lion when word is read or picture observed Shows tears or smiles or other emotional response to picture or story
B. Finger play--attending	Observes with interest while others perform finger play
C. Finger play--participating, acting out	Acts out the finger play
D. Role playing	
1. Spontaneous	Assumes role on his own such as: Plays cowboy and Indian Marches like a soldier Plays mother
2. Directed	Acts out part he chooses to be in story such as: Character of Billy Goat Gruff Character of Cinderella
E. Composes original story	Tells about something--could be spontaneous or directed (Length and quality depend upon child's maturity)

Pre-Reading Skills

Field of Learning Being Read To

The child's pleasure in being read to and his enjoyment in participating in this activity is indicated by his willingness and sometimes eagerness to come to reading when he is asked to do so. This is also indicated by his interest in listening to stories that have pictures which attract his attention and illustrate what is being read, and later by listening to stories even though there are no pictures for him to follow.

Sometimes his interest in reading is shown by his requests to have reading done, or he may take a book to the teacher to have her read it. At different stages of development, his interest may be greatest with short stories, and later with medium or long ones, according to his age and ability and the duration of time he is willing to be involved.

Sometimes a child will get a book from the shelf in order to retell a story that has been read to him. He may page through it pretending to read by recalling what had been read to him, or he may read the pictures as he turns the pages.

Pre-Reading Skills

Field of Learning Being Read To

Symptoms

Guides

- | | |
|------------------------------|---|
| A. Comes readily to reading | Responds without hesitation when reading time comes |
| B. Listens to stories | |
| 1. With pictures | Pays attention when he can see pictures of what is being read |
| 2. Without pictures | Pays attention when he cannot see pictures of what is being read
Pays attention when listening to a story on records |
| C. Asks to have reading done | Requests teacher to read to him or to the group |
| D. Listens to stories | Gives attention to stories being read |
| 1. Short | (Length of story to which he responds positively must be considered according to the age and maturity of the child) |
| 2. Medium | |
| 3. Long | |
| E. Gets book to retell story | Gets book from shelf and tells story he has heard read to him
He turns pages and reads pictures where possible |

Pre-Reading Skills

Field of Learning Bookhandling

Very early by observation and later by experience, a child learns what books are for. While he is still telling a story by the pictures, he says he is reading. Before he can bring meaning into this activity, he must learn to orient the book properly--to hold it and place it in the proper position for reading. This involves the need to know the front and back, the top and bottom, and the location of the title of the book.

By observation he learns where the story begins and where it ends. He needs to turn the pages properly from right to left, one at a time, in order to follow the story through.

When he has advanced beyond picture reading, he learns to follow the words in horizontal rows, and to return to the beginning of the next line to follow through again and again. He observes the relationship of the text and pictures so that he can point out which picture represents the part of the story that is being read.

Pre-Reading Skills

Field of Learning Bookhandling

<u>Symptoms</u>	<u>Guides</u>
A. Book is to read	Responds to book as something to read
B. Orients book correctly	Places book in proper position for reading
C. Knows where beginning is	Points to page story begins when asked
D. Knows where ending is	Points to page story ends when asked
E. Knows where title of book is	Points to place of title of book when asked
F. Knows where front of book is	Points to place of front of book when asked
G. Knows where back of book is	Points to place of back of book when asked
H. Turns pages correctly(R-L)	Can turn pages one at a time from right to left
I. Knows where top of book is	Points to top of book when asked
J. Knows where bottom of book is	Points to bottom of book when asked
K. Left to right reading	Knows to read words in horizontal rows from left to right
L. Rows-return sweep	Knows to return to beginning of next line to continue
M. Observes relationship of text and pictures	Can tell what picture goes with what is being read

Pre-Reading Skills

Field of Learning Persons and Names

It can be accepted that a child recognizes his name when he appears to respond to the sound of it when spoken by another. In associating with others, he soon learns that each person has a name. He learns to relate that name to a certain individual. Soon he can observe another's physical presence or absence and he associates the person with the name.

The child learns to recognize his own name when it is written. At first it may be attached to him physically and to a place where he sits or where his belongings are located. This written name, then, becomes part of him. As his view widens, he sees that others have written names which belong to their places and things, and he learns to associate others with their written names.

Later he copies or writes his own name just as he has learned to recognize it in written form. Soon he is able to write the names of others.

Spelling his name and the names of others comes simultaneously with writing names or follows as he sees them in letter form and writes them.

Pre-Reading Skills

Field of Learning
Persons and Names

Symptoms

Guides

A. Recognizes oral names

- | | |
|--------------|-------------------------------------|
| 1. Self | Knows when his name is said |
| 2. Others | Knows when names of peers are said |
| 3. Absentees | Knows names of peers who are absent |

B. Recognizes written names

- | | |
|------------------|---|
| 1. Self | Knows his own name when he sees it |
| 2. Others (some) | Knows names of some others--peers
or siblings--when he sees the
names |

C. Writes names

- | | |
|------------------|---|
| 1. Self | Can write or copy his own name |
| 2. Others (some) | Can write or copy some other name
or names |

D. Spells names (orally)

- | | |
|-----------|--|
| 1. Self | Can say letters in own name in proper
sequence |
| 2. Others | Can say letters in names of others
in proper sequence |

Pre-Reading Skills

Field of Learning Visual Discrimination

Visual discrimination here pertains to the general category of things. It is necessary to know what is meant by likeness and what is meant by difference when referring to many kinds of things. Then this knowledge must be applied in picking out likenesses and picking out differences when a number of things are observed. This involves being able to distinguish both likenesses and differences in the process of selecting between the two.

Recognizing a letter as a letter when it appears and knowing that other forms such as signs, numbers, geometrical figures and such are not letters is a step in visual discrimination. It is not important that one be able to name the letter but that he knows that it is a letter. This is considered to have been accomplished if any letter is distinguished from another form. In looking at words as a first step in recognition, a child learns that the first letter can change a word that otherwise looks like another and that the order of letters is vital in distinguishing words. The letters must be in a certain order to form a word. This is followed by recognition of complete words when they are observed anywhere.

Pre-Reading Skills

Field of Learning Visual Discrimination

<u>Symptoms</u>	<u>Guides</u>
A. Seeing simple likenesses and differences	This pertains to a general category of things He knows the concept
1. Knows likenesses	"Pick out the shapes that are alike." "Find a color that is the same as or like your dress."
2. Knows differences	"Pick out the shape that is different." (Show three--two alike)
3. Discriminates between likenesses and differences	"Are these alike or different?" (Show two objects)
B. Distinguishes letters from other forms (any)	Can pick out letters from other forms (Need not know the letter names)
C. Distinguishing words	
1. First letters	Knows that first letters can change a word--"book," "look"
2. Letter order	Knows that we must have a certain order of letters for a word--boy, yob, oby, byo
3. Whole words	Recognizes some whole words--"go," "say," "cat"

Pre-Reading Skills

Field of Learning Auditory Discrimination

Distinguishing familiar sounds such as tapping, running water, etc. is an early sign of auditory discrimination. Rhyming is the recognition of sounds that are alike and occur at the end of a word or sentence or poem as in a nursery rhyme. The sounds do not necessarily need to be real words--just so they sound the same.

Then follow recognition and ability to distinguish sounds that occur at the beginning of a word and at the end of a word. Sounds occur in the auditory area and are essential to development of reading skills.

Pre-Reading Skills

Field of Learning
Auditory Discrimination

<u>Symptoms</u>	<u>Guides</u>
A. Distinguishing familiar sounds	Recognizes sounds--tapping, running water, pencil sharpener, etc.
B. Rhyming	Can say syllables or words that rhyme--sense or nonsense, as bu, fu, su, or cat, pat, sat
C. Letter Sounds	
1. Beginning sounds	Can distinguish letter sounds at the beginning of a word-- <u>cat</u> , <u>fat</u>
2. End sounds	Can distinguish letter sounds at the end of a word-- <u>cat</u> , <u>can</u>

Pre-Reading Skills

Field of Learning Attempts to Read

Children relate very early to books by looking at pictures and responding to them in many ways. Sometimes a child attaches a name he originates for a book that he likes--a special name for a special book. He reads or tells stories from an unfamiliar book such as a library book or a book another child has brought in. He might ask to read from a certain book even though he is not able to really read.

Words are learned by memorizing those he sees and reads often. These he is able to pick out of a book, newspaper, or any printed material. When he encounters a word that he doesn't recognize, he often asks someone what it is.

Whenever the opportunity is presented, he wants to read and he is disturbed by and objects to being interrupted in any way. He is happy to use his knowledge of words to help other children who are not as accomplished as he is.

Sometimes he brings a book from home or from the library so that he can sit down and read it in school when he has the opportunity.

Pre-Reading Skills

Field of Learning
Attempts to Read

<u>Symptoms</u>	<u>Guides</u>
A. Relates to book--responds to pictures in book	Pats the dog in the picture or feels the ball, etc.
B. Attaches name he originates for book	Calls book "The Billy Goat Book," etc. (needs not be spontaneous but can be)
C. Reads (tells) stories from pictures in unfamiliar book	Reads (tells story from a book someone has brought in or from a library book)
D. Asks to read from a particular book (even though he is not able)	Wants to read from a book of his choice even though it may be too difficult
E. Learns words	Memorizes words he sees
F. Spontaneously picks out words	Says, "Oh, that's 'look'," or some other word in print in newspaper, on board, etc.
G. Asks help with reading	Asks teacher or someone else, "What's this word?"
H. Reads whenever asked to	Wants to read when opportunity is presented
I. Resists interruptions of reading	Is reluctant to do something else, as when teacher says, "It's time to do this," or when he thinks noise prevents teacher from hearing his reading and says, "You can't hear me."
J. Helps others read	Tries to help children who are not as far along as he is
K. Brings library or other books to read (himself)	Brings a book from the library or home that he wants to read

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